

CLAIMS

1. A mobile transceiver having:
2 a system for generation of position information and
means for transmitting said position information.
2. The invention of Claim 1 wherein said system for generation of position
2 information includes means for receiving a signal from a satellite.
3. The invention of Claim 2 wherein said system for generation of position
2 information includes means for receiving a Global Positioning System signal.
4. The invention of Claim 1 wherein said system for generation of position
2 information includes means for receiving a signal from an airborne platform.
5. The invention of Claim 1 wherein said means for transmitting said position
2 information includes a CDMA transmitter.
6. A base station having:
2 means for receiving position information from a remote unit and providing a
received position signal in response thereto and
4 means for directing a beam in response to said received position signal.
7. The invention of Claim 6 wherein said position information is provided at
2 least in part by a Global Positioning System.
8. The invention of Claim 7 wherein said remote unit is a mobile transceiver.
9. The invention of Claim 8 wherein said mobile transceiver is a CDMA
2 transceiver.

2 10. The invention of Claim 8 wherein said beam is directed to said transceiver.

2 11. The invention of Claim 6 wherein said means for directing a beam
2 includes a smart antenna.

2 12. The invention of Claim 11 wherein said means for directing a beam
2 includes an antenna array.

2 13. The invention of Claim 12 further including means for driving said array
2 to output a directed beam.

2 14. The invention of Claim 13 wherein said means for driving includes a
2 beamforming network.

2 15. A cellular communications system comprising:
2 a mobile transceiver having:
4 a GPS system for generation of position information and
4 means for transmitting said position information and
a base station having:
6 means for receiving said position information and providing a
received position signal in response thereto and
8 means located at said base station for directing a beam in response to
said received position signal.

16. The invention of Claim 15 wherein said GPS system is GPS assisted.

2 17. The invention of Claim 15 wherein said means for directing a beam
2 includes a smart antenna.

18. The invention of Claim 17 wherein said means for directing a beam
2 includes an antenna array.

19. The invention of Claim 18 further including means for driving said array
2 to output a directed beam.

20. The invention of Claim 19 wherein said means for driving includes a
2 beamforming network.

21. A method for effecting directional cellular communications including the
2 steps of:

generating position information at a mobile transceiver;
4 transmitting said position information;
means for receiving said position information at a base station and providing a
6 received position signal in response thereto; and
directing a beam from said base station to said mobile transceiver in response
8 to said received position signal.